

REMARKS

This is responsive to the Office Action mailed May 17, 2007.

Section 102 Rejections

Claims 30 - 48 stand rejected under 35 U.S.C. §102(b) as being anticipated by Hult, U.S. Patent No. 5,201,352 ("Hult"), Kendra, U.S. Patent No. 4,169,690 ("Kendra"), and Stier, U.S. Patent No. 3,613,197 ("Stier"). Applicant respectfully traverses the rejections because the rejected claims all require "curvilinear cutting edges," and none of the cited references disclose curvilinear cutting edges, as shown below.

Hult

Applicant has previously shown that Hult does not disclose curvilinear cutting edges, in Remarks to the Amendment filed September 11, 2006. That showing is as follows:

Hult describes a cutting edge 3 and a cut-out part 2. From the description, it is clear that these are different parts, one being adjacent to the other:

The tooth 1 . . . essentially has a triangular shape. . . . Tips 4, 5, 6 of the triangle are cut in such a way that the forwardly located edge 3 . . . of the tip 4 will be located a slight distance further away from the base B than the backwardly located edge 7 of the cut-away tip. The forward corner 3 at the cut-away part of the tip 4 . . . obtained in this way will define a cutting edge. *A cut-out part 2 is formed adjacent this cutting edge*" (emphasis added).

It is understood from Figure 1 of the reference that the "cut-out part 2" is a piece of the tooth 1 that is removed from the tooth 1, and since it includes a curved middle portion (unreferenced), leaves a curved surface of some sort on the tooth. However, the above-quoted passage from the reference makes two clear points: (1) "the corner 3" defines the cutting edge;

and (2) the curved portion 2 is not part of “the corner 3,” and so it follows that it is not part of the cutting edge. Therefore, the Examiner’s apparent assumption that the curved middle surface is a cutting edge is contrary to the teachings of the reference.

Kendra and Stier

These references both pertain to the same type of cutter, which is known in the art as a “threading insert” and which is used for cutting threads. It is important to understand how the device makes a cut in order to identify the cutting edges, and neither reference provides a good description of this, it being apparently assumed that people of ordinary skill are familiar with how such devices are used.

To fill this gap, Figure 3 of Kendra is reproduced in the attached Exhibit #1, augmented to show a threaded rod 12, the threads of which are being cut with the insert 10. The cutting edges are circled. Kendra identifies the cutting edges as a “forward cutting region 26” (Col. 1, lines 64 - 67; see Figure 2 of Exhibit #1), and Stier identifies the cutting edges as “first upper cutting edge 30” and “lower cutting edge 32” (see Col. 2, lines 24 - 26 and Figure 1 of the Stiers reference).

As shown in Figure 2 and 3, the cutting edges are linear, and must be linear or they could not function to cut threads.

Anticipation requires that the precise subject matter claimed be either expressly or inherently described in a single reference. There is therefore no anticipation by any of the Hult, Kendra and Stiers references, because none of the references expressly or inherently describes curvilinear cutting edges, which is an express requirement of claims 30 - 48.

It is noted for the record that Applicant does not concede the Examiner's position, which is moot, that there is an attack relief angle disclosed in these references, or if there is, that it is in the claimed range.

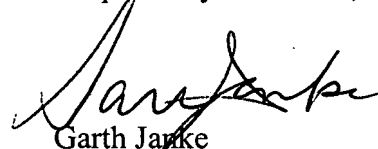
Section 103 Rejections

The claims are also rejected as being unpatentable under 35 U.S.C. §103(a) over the same three references. The ground for rejection is formulated as being that it would have been obvious to provide an angle of attack in the claimed range. Applicant respectfully traverses the rejections.

The Supreme Court has just reiterated, in *KSR Int'l Co. v. Teleflex, Inc.*, that any analysis leading to a conclusion of obviousness must take into account the differences between what is claimed and what is disclosed in the prior art. Here, the allegation did not take into account the difference noted above, that the cited art does not disclose curvilinear cutting edges. So a required element of the required *prima facie* case is missing.

For all of the above reasons, it is respectfully submitted that the claims are in condition for allowance, and the Examiner is respectfully requested to allow claims 30 - 48 and pass this case to issue.

Respectfully submitted,



Garth Janke
Reg. No. 40,662
(503) 228-1841